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## Tuberculosis and tracheal bronchus

Anomalies of the lung and bronchial tree are diagnosed with increasing frequency as a result of refinements in modern imaging.<sup>1</sup> Most of these are rare and almost always asymptomatic congenital malformations. Some of these anomalies are found during investigations in patients with respiratory diseases.

Tuberculosis is one of the ten main causes of death in the developing world; pulmonary tuberculosis is the most common clinical form.<sup>2</sup> Even with completion of appropriate treatment, this disease can produce progressive destruction of lung tissue, and cavitation is a common sequela. Following cavitation, many patients can go on to develop fungal ball, recurrent pneumonia and hemoptysis across variable time intervals; some may remain asymptomatic for life.<sup>3</sup> We report below, the case of a patient who had tuberculosis 15 years ago and received appropriate chemotherapy. After 15 asymptomatic years, she presented with acute hemoptysis and further investigation led to a diagnosis of bronchial anomaly.

A 41-year-old female patient presented after an episode of hemoptysis in July 2006. The patient had had pulmonary tuberculosis at 12 years of age and again at 26 years of age; both episodes had been adequately treated and she had experienced no other illness or pulmonary symptoms since then. She presented with a bronchial sound in the right upper quadrant. Plain chest radiography showed a right-apical cavitation. Three specimens of sputum were smear- and culture-negative. Computed tomography imaging revealed an extensive right upper lobe cavitation without signs of active disease and a tracheal bronchus arising distal to the origin of the upper lobe bronchus, so-called posteparterial (Figure 1).

Congenital anomalies most often confused with tuberculosis are unilateral lung hypoplasia, bronchogenic cysts

and tracheal bronchus with an anomalous lobe.<sup>4</sup> Although congenital anomalies are often confused with tuberculosis, our case describes a tracheal bronchus in a patient with a large persisting tuberculosis cavity. To-date only three cases of this association have been reported in the literature.<sup>5,6</sup>

Tracheal bronchus is not such a rare event and its association with tuberculosis is probably underestimated. Tuberculosis and other infections can occur as a result of insufficient drainage of the involved bronchi.<sup>6</sup> The identification of this anomaly is very important in order for the physician to perform an adequate bronchoscopy, to avoid difficulties in placement or malpositioning of an endotracheal tube, and for surgical planning when a resection is required.



**Figure 1** Tracheal bronchus in a patient with sequelae of tuberculosis (3D reconstruction).

*Conflict of interest:* No conflict of interest to declare.

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## Petri-dish larva migrans

An otherwise healthy young woman began complaining of diarrhea a few days following a cesarean section. Broad-spectrum antibiotics were administered perioperatively due to a suspected uterine infection. Medical history did not reveal any possible past exposure to enteric pathogens. Stool samples were sent for culture and were negative for pathogenic

*Escherichia coli*, *Shigella*, *Salmonella* and *Yersinia* species, as well as *Clostridium difficile* toxins A and B. Growth on campylobacter agar following incubation for 48 hours in micro-aerophilic conditions and temperature of 42 °C consisted of colonies of non-pathogenic fecal flora (Figure 1, arrows). At the center of the agar plate, spiral lines of bacterial growth were evident (Figure 1, chevron), opposing to the normal horizontal plate streaking lines generated by a bacteriological loop (Figure 1, curved arrow). This rare occurrence is secondary to the spontaneous movement on agar of a viable intestinal helminth. Microscopy in this case revealed rhabditiform larvae of *Strongyloides stercoralis*.

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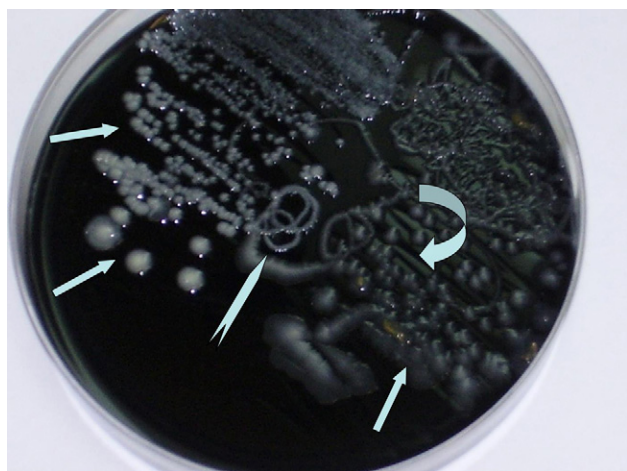
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**Figure 1** Spiral lines of fecal flora growth on campylobacter agar representing the migration of a viable intestinal helminth.

## Subcutaneous zygomycosis due to *Conidiobolus incongruus*

Conidiobolomycosis, one of the forms of subcutaneous zygomycosis, also known as rhinoentomophthoromycosis,<sup>1,2</sup> is a

granulomatous infection usually caused by *Conidiobolus coronatus*.<sup>1–4</sup> The first case of conidiobolomycosis in humans was reported in 1965.<sup>3</sup> Most cases have been reported from Africa, Asia and the Americas, i.e., tropical or subtropical regions, and few cases have been caused by *Conidiobolus*